

ABSTRACT OF THE DISCLOSURE

A variable stroke engine includes: a connecting rod connected at one end to a piston through a piston pin; a subsidiary arm turnably connected at one end to the other end of the connecting rod and connected to a crankshaft through a crankpin; and a control rod connected at one end to the subsidiary arm at a position displaced from a connection position of the connecting rod; a support position of the other end of the control rod being capable of being displaced in a plane perpendicular to an axis of the crankshaft. In the variable stroke engine, a switchover means switches over: a state in which a high expansion stroke is provided such that the stroke of the piston in an expansion stroke is larger than that in a compression stroke when an engine load is high; and a state in which a constant compression ratio is provided when the engine load is low. Thus, a reduction in fuel consumption is achieved irrespective of the level of an engine load, while putting a high value on a reduction in fuel consumption in a state in which the engine load is low.